

# FORESTRY RESEARCH NEWS



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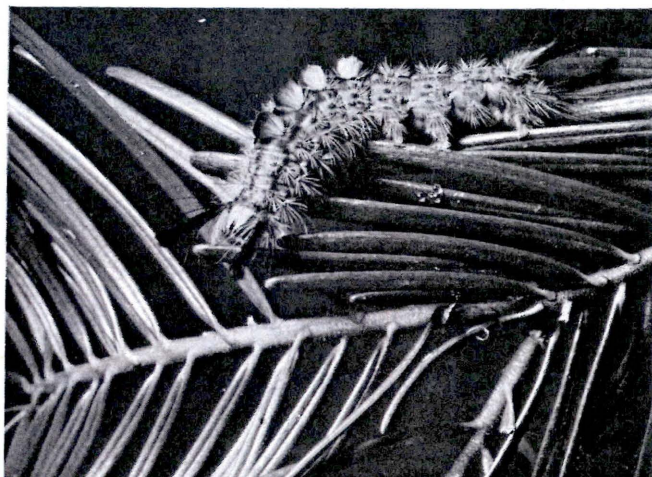
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## NATURAL CONTROL FOR THE DOUGLAS-FIR TUSSOCK MOTH?

SAN FRANCISCO ... A major infestation by the Douglas-fir tussock moth, a forest pest that defoliates and kills the tops and lower branches of thousands of fir trees, is expected to be a major problem this summer in the Eldorado National Forest, located east of Sacramento, Calif. According



Douglas fir tussock moth larva

to Douglas R. Leisz, U.S.

California Regional Forester,

"With the leadership of research personnel from the Pacific Northwest Forest and Range Experiment Station in Portland and Corvallis, Oregon, we are planning field tests of the aerial application of a naturally occurring virus which infects and kills larvae of

the tussock moth. The experiment will be conducted on three 60-acre test plots on the Eldorado Forest in mid or late June, depending on weather conditions."

He went on to say, "This natural biological control is a new look in the right direction for controlling forest pests, and a possible alternative to persistent chemicals, such as DDT, which is no longer used by the Forest Service." According to Dr. Milton J. Stelzer, Forest Service Project Coordinator from Corvallis, the field tests will involve the use of the same

... Tussock moth

virus that affects the Douglas-fir tussock moth in Nature. We hope that the aerial application of a highly purified virus will reduce the moth's population before it reaches tree-killing, epidemic proportions. Stelzer noted that exhaustive laboratory tests have proven the virus effective against the moth but harmless to non-target organisms, including man. Hopefully in the field test, the larvae will feed on the sprayed needles and become infected with the virus. Leisz said, "There are around 100,000 acres in the Eldorado National Forest that have widely scattered or isolated infestations that could reach epidemic proportions unless we find a safe and effective way of controlling the size of the insect's population. If this field testing proves successful, we will know we can prevent Douglas-fir tussock moth epidemics by non-chemical means. It will be a major breakthrough in using a biological control for forest pest populations."

Assisting in the project are the California Division of Forestry, the University of California School of Entomology, and the Eldorado County Agriculture Commission.

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